



IUScholarWorks at Indiana University South Bend

## **Job Design Effects on Novice and Repeat Entrepreneurs' Job Stress.**

Schjoedt, Leon

To cite this article: Schjoedt, Leon. "Job Design Effects on Novice and Repeat Entrepreneurs' Job Stress." *The International Journal of Management and Business*, vol. 3, no. 2, 2012, pp. 35–47.

This document has been made available through IUScholarWorks repository, a service of the Indiana University Libraries. Copyrights on documents in IUScholarWorks are held by their respective rights holder(s). Contact [iusw@indiana.edu](mailto:iusw@indiana.edu) for more information.

# **Job Design Effects on Novice and Repeat Entrepreneurs' Job Stress**

Leon Schjoedt

Judd Leighton School of Business and Economics, Indiana University,  
South Bend, IN, 46634, U.S.A., leonschjoedt@ymail.com

## **Abstract**

In this study the relationships between four core job characteristics (autonomy, task variety, task identity, and feedback) and job stress are examined for 192 novice and 229 repeat entrepreneurs. Autonomy was a significant factor in both novice and repeat entrepreneurs' job stress; whereas, task variety was a significant factor in job stress for novice entrepreneurs but not for repeat entrepreneurs. The results indicate that the job characteristics approach expands the understanding of entrepreneurs' job stress, and that important similarities and differences exist between novice and repeat entrepreneurs in how job characteristics influence job stress.

**Keywords:** Person-Environment Fit, Job Characteristics, Job Stress, Novice Entrepreneurs, Repeat Entrepreneurs

## **Introduction**

Stress at work—and the toll it takes on individuals and organizations—has become a major issue among employees in today's work environment and, as a result, has become a popular topic of research in the management literature. Both the causes and effects of stress in the work environment have been closely examined for a range of occupations [1]. In addition, the correlations between specific job characteristics and job stress have been studied for employed individuals [2]. However, the factors influencing entrepreneurs' work-related stress (job stress)—particularly in the context of specific job characteristics—have received little, if any, attention in the literature and is the focus of this study.

Job stress generally can be defined as an aversive or unpleasant emotional and psychological state that stems from adverse job-related experiences, particularly those that involve uncertainty or are outside the individual's control. Specifically, research has shown high job demands in relation to an individual's abilities and resources can lead to the experience of job stress [3].

Previous research has examined job stress primarily from two perspectives: 1) the factors that create job stress (stressors) and 2) how job stress influences individual and organizational outcomes. Scholars have also addressed job stress for multiple occupations. One occupational group that has received limited and only sporadic research attention is entrepreneurs [4, 5]. While all employees experience job stress, entrepreneurs are expected to have particularly stressful jobs due to their long work hours and the demands associated with the creation of a new venture, as well as the responsibility for its executive leadership, employees, survival, and

economic success [6, 7]. These demands and responsibilities may account for why entrepreneurs have been found to experience more job stress than managers in a comparative study [4].

Like most research on entrepreneurs' job stress (see for example, Teoh & Foo [8]), the study by Buttner [4] was based on role theory—specifically the argument that role ambiguity, role overload, and role conflict directly influence job stress for entrepreneurs. Like the findings in the general stress literature, the empirical findings in the role theory-based job stress research addressing entrepreneurs are not consistent. For example, Buttner [4] found entrepreneurs experienced more role ambiguity than managers, while Harris and colleagues [9] found entrepreneurs experienced less role ambiguity than their comparison groups of white collar workers, blue collar workers and professionals.

Of the four job stress models that dominate in the general job stress literature, the job stress model based on role theory is the most prevalent [10]. The role theory-based stress model has both strengths and weaknesses in terms of accounting for job stress, which may explain the inconsistent results when role theory is used to examine job stress. Another model that guides job stress research is the Person-Environment (P-E) fit model. This model has received only limited attention in relation to entrepreneurship. The P-E fit model posits, if a person fits the environment well, the person will experience job satisfaction; whereas, if the person does not fit the environment, the person will experience job stress.

Placing the P-E fit model in the context of recent research and theory developments in the organizational literature provides an alternative to role theory in explaining entrepreneurs' job stress. These recent developments include using job design theory to examine the direct relationships between core job characteristics and job-related outcomes other than job satisfaction, such as job stress, creativity, health, and well-being [11]. In this context, job stress is an outcome of a not-good fit between a person and job characteristics [12]. This means, if the entrepreneur does not fit the characteristics of the entrepreneurial work environment (assessed via core job characteristics inherent in all work), the entrepreneur will experience a greater degree of job stress.

The central argument in job characteristics theory is that job characteristics influence individual-level job-related outcomes, such as job satisfaction and job stress [11]. Extensive research has examined the influence of job characteristics on job satisfaction, while research on the influence of job characteristics on job stress is substantially less. This is despite the assumption noted by Karasek and Theorell that the work environment is an important predictor of job stress [13]. The reason for the limited research in this area may be that job characteristics researchers only recently have begun to examine other outcomes than job satisfaction [11].

Research examining the relationship between job characteristics and job stress may be grouped into two categories: 1) research that assumes the relationships are the same for different occupational types and 2) research that assumes the relationships may vary depending on occupational types. Some scholars are in favor of using occupational-specific models [1]. Consistent with the job characteristics literature, recent research in the area of job stress supports the occupational-specific models [14]. Even though these two research streams are informative, they are largely based on consideration of one or two *a priori* select job characteristics. These research streams are not based on testing the four core job characteristics inherent in all jobs—autonomy, task variety, task identification, and feedback—that have been the basis for most job characteristics research [2, 11, 15, 16]. Furthermore, to date, no study has examined how core job characteristics influence entrepreneurs' job stress. Thus, one purpose of the present study is to examine how the four core job characteristics directly relate to entrepreneurs' job stress.

Although entrepreneurs have received limited attention from scholars in job stress research, no study has examined job stress for different types of entrepreneurs. A growing body of research shows there are important differences between novice entrepreneurs, those who have started just one venture, and repeat entrepreneurs, those who have started more than one new venture. Among the differences identified between novice and repeat entrepreneurs is what each group considers as part of the opportunity recognition process [17], activities carried out during the new venture creation process [18], and strategies pursued [18].

Because these important differences among novice and repeat entrepreneurs have been identified, but not studied in the context of job stress, a second purpose of the present study is to examine how the four core job characteristics of autonomy, task variety, task identification, and feedback relate to job stress for novice and repeat entrepreneurs. In addition, this study will examine whether these four core job characteristics influence job stress for novice and repeat entrepreneurs differently.

### **Core Job Characteristics in an Entrepreneurial Context**

Four core job characteristics inherent in all work have consistently been used in empirical job characteristics studies [2]. These four core job characteristics are autonomy, task variety, task identity, and feedback from the job itself. With the exception of one study only autonomy has been examined in studies relevant to entrepreneurship [19]. These studies were based on *a priori* selection of the job characteristic in examining job satisfaction of the self-employed [20]. The study that did examine all four job characteristics did not examine the relationship between job characteristics and job stress of entrepreneurs [19]. Because in the context of P-E fit a strong P-E fit is associated with job satisfaction and a poor P-E fit is associated with job stress, the results provided in the study of entrepreneurs' job characteristics [19] along with other studies in the general stress literature are instructive.

To illustrate their relevance, each of the four core job characteristics are described and placed in an entrepreneurial context in the following paragraphs. Autonomy is "the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out" [21, p. 258]. Given this definition, it is apparent why scholars focused on autonomy in their research on the self-employed [20]. A high level of autonomy is typically considered one of the key factors influencing the decision to pursue an entrepreneurial career [22]. Also, the risks and uncertainties of an entrepreneurial career may be mitigated by an increased perception of control over situations stemming from an experience of higher levels of autonomy [23].

However, entrepreneurs do not enjoy unlimited autonomy, as their autonomy may be restricted by deadlines, customer requests, meetings, obligations, or business-related travel [23]. Unlike the self-employed with established businesses, many times the entrepreneur needs to build a customer base, placing him or her in a situation that restricts autonomy. Because empirical evidence shows autonomy is a significant factor in accounting for entrepreneurs' high level of job satisfaction [19], it follows autonomy also would be a significant factor in limiting entrepreneurs' job stress. This is supported by recent findings in the general stress literature [14]. Consequently, autonomy is hypothesized to have a significant negative relationship with job stress for entrepreneurs. The literature does not provide any indication whether novice and repeat entrepreneurs experience the same or different levels of autonomy, or whether the relationship between autonomy and job stress differs for novice and repeat entrepreneurs. Thus, no hypothesis is formed regarding differences in autonomy between novice and repeat entrepreneurs.

Task variety is “the degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of the person” [21, p. 257]. Entrepreneurs typically engage in a wide range of activities as they conceptually develop the business venture; carry out their ideas and plans; conduct marketing research and marketing activities; create the organization; build a management team; develop customer relationships; develop products and services; sell the products and services; acquire and manage resources; manage employees; solve problems with products, services, operations, suppliers, customers and employees; conduct the work functions of employees as necessary; and many more activities.

In her seminal work, Penrose [24] points out that, while managers carry out the practical side of entrepreneurship by managing the venture on a daily basis, entrepreneurs have the added responsibility of strategically developing the venture. Thus, in practice, entrepreneurs are both visionaries and managers. Based on these considerations, it appears entrepreneurs engage in a greater variety of activities than do their non-entrepreneurial counterparts. Further, empirical findings show entrepreneurs experience more task variety than managers, and task variety is a significant factor in accounting for entrepreneurs’ job satisfaction [19]. As with autonomy, the general stress literature also provides some support for task variety influencing the level of job stress [14].

Given this research, the literature does not provide any suggestions regarding whether novice and repeat entrepreneurs experience the same or different levels of task variety. However, because novice entrepreneurs are more likely than more experienced repeat entrepreneurs to be faced with unfamiliar situations and tasks that can cause job stress, task variety is hypothesized to be a significant factor in the job stress of novice entrepreneurs, but not that of repeat entrepreneurs [25, 26, 27].

Task identity is “the degree to which the job requires completion of a ‘whole’ and identifiable piece of work; that is, doing a job from beginning to end with a viable outcome” [21, p. 257]. Many conceptual models of the venture creation process show the entrepreneurial process as a sequence of clear and identifiable steps. However, such a clearly defined, step-by-step process is far from reality for most entrepreneurs.

Many case studies show there is no clear beginning or end to the entrepreneurial process or to specific steps of the venture creation process. As a result, entrepreneurial work does not appear to provide a basis for entrepreneurs to experience a high level of task identity. However, the completion of individual, discreet entrepreneurial activities may provide entrepreneurs the experience of task identity. For example, venture start-up activities, including securing funding, hiring employees, making the initial investment of funds, buying equipment, preparing a business plan, and making the first sale [28], may represent individual tasks that allow entrepreneurs to experience task identity. As these two viewpoints show, there are opposing factors inherent in task identity.

While individual entrepreneurial activities may provide an opportunity for entrepreneurs to experience task identity, task identity has not been found to be a significant factor in entrepreneurs’ job satisfaction [19]. Considering this lack of a significant association between task identity and job satisfaction, and the opposing forces inherent in task identity, it is hypothesized that task identity is not a significant factor in job stress for either novice or repeat entrepreneurs.

Feedback is “the degree to which carrying out the work activities required by the job results in the individual obtaining direct and clear information about the effectiveness of his or

her performance” [21, p. 258]. Examples of clear and direct performance feedback for entrepreneurs include start-up indicators, such as sales (especially the first sale), positive cash flow, filing federal tax, and receiving funding, among others [28]. Case studies clearly show entrepreneurs obtain direct and clear feedback from their entrepreneurial activities. This anecdotal information is supported by findings that show feedback is a significant factor in entrepreneurs’ job satisfaction [19]. Placing this in the context of motivational theory such as the two-factor theory [29] where feedback acts as a motivating factor that results in a degree of job satisfaction rather than in job dissatisfaction or job stress, it is hypothesized that feedback is not a significant factor in job stress for either novice or repeat entrepreneurs.

### **Methodology**

The sample used for the present study was drawn from a high technology directory that has previously been found to yield appropriate samples for research on entrepreneurs. This directory is representative of the population of high technology firms [30]; and it contains firms in a wide range of different development stages indicating entrepreneurial activity [31].

The data collection was completed by surveying 2,392 businesses using a four-contact procedure [32]. This four-contact survey administration yielded 572 surveys, a response rate of 25 percent. Using the number of employees and year of venture founding provided by the directory, no significant mean differences were found between the responses from the first and second mailings or between respondents and non-respondents.

Of the 572 responses returned, a number of surveys were eliminated from consideration for the following three reasons: 1) they were incomplete; 2) the survey respondent was considered an outlier because the venture had more than 1,000 employees, or 3) the survey respondent was not an entrepreneur (not a founder of the venture). These eliminations resulted in 421 cases from entrepreneurs. To identify novice and repeat entrepreneurs, the survey included an item asking if the respondent had previously started or founded other business ventures. Based on this survey item, the 421 responding entrepreneurs were grouped into 192 novice entrepreneurs—individuals who had started/founded only the present venture—and 229 repeat entrepreneurs—individuals who previously had started at least one other venture.

### **Measures**

A number of job stress measures have been created. Most job stress measures have disadvantages—including survey length and questions inappropriate for entrepreneurs—preventing their use in the present study. Thus, a 16-item stress measure developed for and used in a study of executives [33] was used in this study. For each of the 16 items, respondents were asked to indicate the level of stress the item produced at work using a five-point scale ranging from 1 (*produces no stress*) to 5 (*produces a great deal of stress*). The 16 items were averaged to obtain a stress score. In an earlier study [33] it was reported that the 16-item stress measure had a coefficient alpha reliability estimate of 0.84; in this study, the alpha was 0.88.

The independent variables—the four core job characteristics (autonomy, task variety, task identity, and feedback)—were assessed by using the Job Characteristics Inventory (JCI) [34]. The JCI includes items pertaining to the four core job characteristics of autonomy (e.g., *to what extent are you to act independently in performing your work function?*), task variety (e.g., *how similar are the tasks you perform in a typical workday?*), task identity (e.g., *how often do you see projects or jobs through to completion?*), and feedback (e.g., *to what extent do you find out how well you are doing as you are working?*). All items were scored on a five-point scale with

response options from 1 (*very little*) to 5 (*very much*). For each of the job characteristics, the items pertaining to it were averaged. The internal reliability estimate for the JCI has been referred to as “*sufficiently high for research purposes*” [35]. In this study, it was 0.76.

As noted earlier, some variables have been shown to moderate the relationship between job characteristics and work-outcome variables, such as job stress. Consequently, the present study included the control variables of age, sex, education, venture size (number of employees), venture performance (sales growth), and venture age to limit the potential for alternative explanations [36].

### Data Analysis

Four regression analyses were conducted—two sets of regressions analyses for the novice and for the repeat entrepreneurs. In the first regression analysis in each set only the control variables—age, gender, education, venture size, venture performance, and venture age—were included. In the second regression analysis in each set, the four job characteristics variables—autonomy, feedback, task identity, and task variety—were entered.

### Results

Table 1 shows the means, standard deviations, and correlations for the independent, dependent, and control variables. The only significant correlation between job stress and a job characteristic was for autonomy. This correlation was significant for both novice and repeat entrepreneurs. The correlations between job stress and each of the four job characteristics for novice and repeat entrepreneurs were examined for significant differences [37]. There were no significant differences between the job characteristic-job stress correlations for novice and repeat entrepreneurs. Further, results from an ANOVA with the independent and dependent variables, showed no significant mean differences between novice and repeat entrepreneurs for these variables, with the exception of task variety ( $F = 4.770, p < .05$ ).

Table 1: Means, Standard Deviations, and Correlations<sup>a, b, c</sup>

Variable	Novice Es		Repeat Es		1	2	3	4
	Means	s.d.	Means	s.d.				
1 Job Stress	2.33	0.65	2.39	0.62		-0.25**	0.11	-0.06
2 Age	3.71	1.05	3.95	1.12	-0.25		-0.12	-0.10
3 Gender	1.17	0.38	1.08	0.27	-0.11	0.00		-0.03
4 Education	4.88	1.28	4.85	1.35	0.06	0.06	-0.13	
5 Venture Size	29.94	59.70	27.79	41.60	-0.01	-0.04	0.00	0.09
6 Venture Performance	13.92	62.48	48.20	483.15	-0.04	-0.04	0.00	0.08
7 Venture Age	13.23	9.18	13.56	9.12	-0.16	0.58**	-0.07	0.01
8 Autonomy	4.43	0.56	4.43	0.54	-0.23	0.15*	0.17*	-0.19
9 Feedback	3.17	0.79	3.23	0.80	-0.13	0.14	-0.04	-0.01
10 Task Identity	4.22	0.70	4.09	0.83	-0.14	0.13	0.03	-0.03
11 Task Variety	3.68	0.46	3.78	0.44	0.11	0.00	-0.02	0.02

Table 1: Means, Standard Deviations, and Correlations (continued)<sup>a, b, c</sup>

	Variable	5	6	7	8	9	10	11
1	Job Stress	-0.23	-0.15 *	-0.13	-0.21 **	-0.09	-0.07	0.01
2	Age	-0.03	-0.11	0.44 **	0.08	0.15 *	0.05	0.01
3	Gender	-0.09	-0.02	0.03	0.14 *	-0.02	0.08	0.10
4	Education	0.09	0.02	-0.19 **	-0.01	-0.05	-0.11	-0.08
5	Venture Size		0.44 **	0.03	-0.02	-0.02	-0.24 **	-0.08
6	Venture Performance	0.18 *		-0.04	0.08	0.14 *	-0.01	0.01
7	Venture Age	0.04	-0.10		0.06	0.03	0.01	0.12
8	Autonomy	-0.05	0.09	0.10		0.06	0.54	0.29 **
9	Feedback	0.00	-0.04	0.06	0.13		0.22 **	0.26 **
10	Task Identity	-0.05	-0.03	0.06	0.45 **	0.18 *		0.18 **
11	Task Variety	0.11	-0.03	0.08	0.11	0.17 *	-0.04	

Note: Correlations for novice entrepreneurs are located below the diagonal and correlations for repeat entrepreneurs are located above the diagonal.

\*\*  $p < .01$ ; \*  $p < .05$

<sup>a</sup> Two-tailed tests; <sup>b</sup> Novice entrepreneurs:  $n = 192$ ; <sup>c</sup> Repeat entrepreneurs:  $n = 229$ .

Table 2 shows the results from the regression analyses. This table shows that the regression coefficients for task identity ( $\beta_{\text{novice}} = .00$ ;  $\beta_{\text{repeat}} = .00$ ) and feedback ( $\beta_{\text{novice}} = -.11$ ;  $\beta_{\text{repeat}} = -.06$ ) were not significant for either novice or repeat entrepreneurs. The results also show that the regression coefficient for autonomy was negative and significant for both novice and repeat entrepreneurs ( $\beta_{\text{novice}} = -.18$ ,  $p \leq .05$ ;  $\beta_{\text{repeat}} = -.21$ ,  $p \leq .01$ ). The results also show that the regression coefficient for task variety was significant for the novice entrepreneurs ( $\beta_{\text{novice}} = .15$ ,  $p \leq .05$ ), but not for the repeat entrepreneurs ( $\beta_{\text{repeat}} = .06$ ). The results for the novice entrepreneurs show that the four core job characteristics accounted for 5.7 percent of variance in job stress ( $\Delta R^2 = .057$ ,  $F = 2.950$ ,  $p \leq .01$ ); and for the repeat entrepreneurs, the results show that the four core job characteristics accounted for 4.2 percent of job stress variance ( $\Delta R^2 = .042$ ,  $F = 4.591$ ,  $p \leq .0001$ ).

The results from a Chow test [38] show that the regression lines with all four job characteristics as independent variables for the novice and repeat entrepreneurs are not significantly different ( $.95F_{11,399} = .988$ ). This finding was furthered by results from the regression analyses with only one job characteristic as the independent variable and controlling for the other job characteristic variables. Comparing these regression lines using the Chow test showed no significant differences between novice and repeat entrepreneurs for any of the four job characteristics: autonomy ( $.95F_{8,405} = 1.367$ ), task variety ( $.95F_{8,405} = 1.581$ ), task identity ( $.95F_{8,405} = 1.715$ ), and feedback ( $.95F_{8,405} = 1.653$ ).

## Discussion

The primary purpose of this study was to advance the job stress literature in general and the literature on entrepreneurship in particular by considering a job stress model not based on role theory. Specifically, it was to explain entrepreneurs' job stress using job characteristics theory [2, 11, 12, 21], which posits that four core job characteristics inherent in all work (autonomy, task variety, task identification, and feedback) account for individual level outcomes.



Table 2: Regression Results

	Novice Entrepreneurs (n= 192)		Repeat Entrepreneurs (n = 229)	
<b>Age</b>	-0.24*	-0.19*	-0.25***	-0.21**
<b>Gender</b>	-0.10	-0.08	0.06	0.09
<b>Education</b>	0.06	0.02	-0.07	-0.07
<b>Venture Size</b>	-0.02	-0.04	-0.18	-0.19**
<b>Venture Performance</b>	-0.06	-0.04	-0.10	-0.06
<b>Venture Age</b>	-0.04	-0.05	-0.03	-0.04
<b>Job Stress</b>				
<b>Autonomy</b>		-0.18*		-0.21**
<b>Feedback</b>		-0.11		-0.06
<b>Task Identity</b>		0.00		0.00
<b>Task Variety</b>		0.15*		0.06
<b>R<sup>2</sup></b>	0.084	0.140	0.131	0.174
<b><math>\Delta R^2</math></b>		0.057*		0.042
<b>Adjusted R<sup>2</sup></b>	0.054	0.093	0.108	0.136
<b>Adjusted <math>\Delta R^2</math></b>		0.039		0.028
<b>F</b>	2.812*	2.950**	5.601****	4.591****

Note: Standardized regression (Beta) coefficients are shown in the table.

\*\*\*\*p < .0001; \*\*\* p < .001; \*\* p < .01; \* p < .05

Based on the existing literature, autonomy was hypothesized to act as a significant factor in limiting both novice and repeat entrepreneurs' job stress. Because novice entrepreneurs are undertaking venture-creation for the first time and therefore would be likely to experience uncertainty, task variety was hypothesized to be a significant factor in accounting for novice entrepreneurs' job stress; however, because repeat entrepreneurs have experience in creating new ventures, task variety was not hypothesized to be a significant factor in accounting for repeat entrepreneurs' job stress. Due to opposing factors inherent in task identity, task identity was not hypothesized to be a significant factor in either novice or repeat entrepreneurs' job stress. Likewise, based on considerations of motivation theory, specifically the two-factor theory [29], feedback was hypothesized not to be a significant factor in either novice or repeat entrepreneurs' job stress.

The results from the present study show autonomy had a significant negative relationship with both novice and repeat entrepreneurs' job stress as hypothesized. This finding is consistent with previous findings from the stress literature [39]. The results also showed that task variety was a significant positive factor in novice entrepreneurs' job stress, but not for repeat entrepreneurs as hypothesized. The results showed that neither task identity nor feedback were significant factors in either novice or repeat entrepreneurs' job stress. These findings are in line with the present study's hypotheses based on both empirical and conceptual job stress literature. Consequently, contributions of the present study include that the job stress literature, in particular pertaining to job characteristics, may be used to explain entrepreneurs' job stress, even when there are differences among entrepreneurs.

The findings of the present study are encouraging as they are important steps in advancing the entrepreneurship literature by means of showing that job design theory explain entrepreneurs' job stress. The findings also illustrate that there are important differences among novice and repeat entrepreneurs. Less encouraging are the small amounts of variance in the novice and repeat entrepreneurs' job stress explained by the four core job characteristics. The literature may provide explanations for the small amounts of variance found in the present study.

Entrepreneurs' work is demanding, but entrepreneurs also have substantial latitude in making decisions—similar to that of top executives [6]. It has been suggested that demanding jobs with high decision latitude are inherently motivating which results in higher levels of job satisfaction and lower levels of job stress ('the buffer hypothesis') [40]. Thus, entrepreneurs are expected to experience a limited amount of job stress. This is supported by empirical findings [14, 41, 42]. Further, when the oft-cited reason individuals become entrepreneurs—the expectation of a high level of autonomy [22]—is placed in the context of the "buffer hypothesis" [34, 40], it follows that when entrepreneurs experience demands perceived as too high or decision latitude perceived as too limited, they experience job stress. Too-high demands (the perception of role overload) has been found to be a factor in entrepreneurs' proclivity for withdrawing from the venture [5]. Thus, if entrepreneurs stay with the venture, it may be due to perceiving the demands of the entrepreneurial work as acceptable, which is consistent with recent findings [41]. In light of this, it is possible that individuals who experience substantial job stress may have opted to exit the venture, indicating there may be a self-selection bias influencing the amount of job stress accounted for by the job characteristics in the present study.

The findings that entrepreneurs experience less job stress than other occupational groups, such as non-founding top executives [41], are also evident internationally. For example, a study of self-employed and salaried employees from Canada and the United States showed that the self-employed experienced significantly less job stress [42]. Even though findings based on international and U.S. samples show that entrepreneurs experience less job stress, an issue that remains is whether theories other than role theory, such as the buffer hypothesis [40], attraction-selection-attribution theory [43], person-environment fit theory [12], job design theory [11], or job characteristics theory [12], can explain the lower levels of job stress using international samples of entrepreneurs. This is especially an issue as research on entrepreneurs' stress has complemented research findings based on U.S. samples. For example, the findings of a study of small business owners in Nigeria were consistent with the stress factors observed by Boyd and Gumpert (i.e., loneliness) [26, 44]; and a study of 50 entrepreneurs in India showed that stress factors related to role theory were factors associated with the entrepreneurs' stress [45]. These considerations show research findings regarding entrepreneurs' stress are consistent across samples from the U.S. and other countries. This may, in part, be due to the use of role theory as a theoretical framework in these studies. Thus, there are many potentially fruitful avenues for future research to enhance our collective understanding of entrepreneurs' stress and its consequences if scholars move beyond role theory as was the case in the present study.

In conclusion, the present study showed that autonomy was a significant factor in both novice and repeat entrepreneurs' job stress, and task variety was a significant factor in job stress of novice entrepreneurs, but not of repeat entrepreneurs. Task identity and feedback were not found to be significant factors in either novice or repeat entrepreneurs' job stress.

This study advances the entrepreneurship literature 1) by examining entrepreneurs' job stress using job characteristics theory rather than role theory, and 2) by examining and finding important differences in the relationships between core job characteristics and job stress among

novice and repeat entrepreneurs; specifically finding that job stress of novice entrepreneurs is influenced by autonomy and task variety, while only autonomy is a significant factor in explaining repeat entrepreneurs' job stress.

### References

1. Bacharach, S., & Bamberger, P. (1992). Causal models of role stressor antecedents and consequences: the importance of occupational differences. *Journal of Vocational Behavior*, 41, 13-34.
2. Grant, A. M., & Parker, S. K. (2009). Redesigning work design theories: The rise of relational and proactive perspectives. *Academy of Management Annals*, 3, 317-375.
3. French, J. R. P., Caplan, R. D. & Harrison, R. V. (1982). *The mechanisms of job stress and strain*. New York: Wiley.
4. Buttner, E. H. (1992). Entrepreneurial stress: Is it hazardous to your health? *Journal of Managerial Issues*, 4, 223-240.
5. Wincent, J., Ortqvist, D., & Drnovsek, M. (2008). The entrepreneur's role stressors and proclivity for venture withdrawal. *Scandinavian Journal of Management*, 24, 232-246.
6. Ganster, D. C. (2005). Executive job demands: Suggestions for a stress and decision-making perspective. *Academy of Management Review*, 30, 492-502.
7. Greenhaus, J. H., & Callanan, G. A. (1994). *Career management*. Ft. Worth, TX: Dryden.
8. Teoh, H. Y., & Foo, S. L. (1997). Moderating effects of tolerance for ambiguity and risk-taking propensity on the role conflict-perceived performance relationship: Evidence from Singaporean entrepreneurs. *Journal of Business Venturing*, 12, 67-81.
9. Harris, J. A., Saltstone, R., & Fraboni, M. (1999). An evaluation of the job stress questionnaire with a sample of entrepreneurs. *Journal of Business and Psychology*, 13, 447-455.
10. Eulberg, J. R., Weekley, J. A., & Bhagat, R. S. (1988). Models of stress in organizational research: A metatheoretical perspective. *Human Relations*, 41, 331-350.
11. Grant, A. M., Fried, Y., & Juillerat, T. (2010). Work matters: Job design in classic and contemporary perspectives. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology*, 1 (pp. 417-453). Washington, DC: American Psychological Association.
12. Kulik, C. T., Oldham, G. R., & Hackman, J. R. (1987). Work design as an approach to person-environment fit. *Journal of Vocational Behavior*, 31, 278-296.
13. Karasek, R. A., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York, NY: Basic Books.
14. Pousette, A., & Hanse, J. J. (2002). Job characteristics as predictors of ill-health and sickness absenteeism in different occupational types—A multigroup structural equation modeling approach. *Work & Stress*, 16, 229-250.
15. Hackman, J. R., & Oldham, G. R. 1980. *Work redesign*. Reading, MA: Addison-Wesley.
16. Fried, Y., & Ferris, G. R. (1987). The validity of the Job Characteristics Model: A review and meta-analysis. *Personnel Psychology*, 40, 287-322.

17. Baron, R. A., & Ensley, M. D. (2006). Opportunity recognition as the detection of meaningful patterns: Evidence from comparisons of novice and experienced entrepreneurs. *Management Science*, 52, 1331-1344.
18. Rosa, P. (1998). Entrepreneurial processes of business cluster formation and growth by 'habitual' entrepreneurs. *Entrepreneurship Theory and Practice*, 22, 43-61.
19. Schjoedt, L. (2009). Entrepreneurial job characteristics: an examination of their effects on entrepreneurial satisfaction. *Entrepreneurship Theory and Practice*, 33, 619-644.
20. Hundley, G. (2001). Why and when are the self-employed more satisfied with their work? *Industrial Relations*, 40, 293-316.
21. Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16, 250-279.
22. Kolvereid, L. (1996). Organizational employment versus self-employment: Reasons for career choice intentions. *Entrepreneurship Theory and Practice*, 21, 23-31.
23. Parasuraman, S., Purohit, Y. S., Godshalk, V. M., & Buetell, N. J. (1996). Work and family variables, entrepreneurial career success, and psychological well-being. *Journal of Vocational Behavior*, 48, 275-300.
24. Penrose, E. E. (1959). *The theory of the growth of the firm*. New York, NY: John Wiley.
25. Baron, R. A. (1994). The physical environment of work settings: Effects on task performance, interpersonal relations, and job satisfaction. *Research in Organizational Behavior*, 16, 1-46.
26. Boyd, D. P., & Gumpert, D. E. (1983). Coping with entrepreneurial stress. *Harvard Business Review*, 61, 44-64.
27. MacMillan, I. C. (1986). To really learn about entrepreneurship, let's study habitual entrepreneurs. *Journal of Business Venturing*, 1, 241-243.
28. Carter, N. M., Gartner, W. B., & Reynolds, P. D. (1996). Exploring start-up events sequences. *Journal of Business Venturing*, 11, 151-166.
29. Herzberg, F. (1966). *Work and the nature of man*. Cleveland, OH: World Publishing.
30. Meyer, G. D., & Dean, T. J. (1990). An upper echelons perspective on transformational leadership problems in high technology firms. *Journal of High Technology Management Research*, 1, 223-242.
31. Hanks, S. H., Watson, C. J., Jansen, E., & Chandler, G. N. (1993). Tightening the life-cycle construct: A taxonomic study of growth stage configurations in high-technology organizations. *Entrepreneurship Theory and Practice*, 18, 5-29.
32. Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey*. New York, NY: John Wiley & Sons.
33. Judge, T. A., Boudreau, J. W., & Bretz, R. D. (1994). Job and life satisfaction of male executives. *Journal of Applied Psychology*, 79, 767-782.
34. Sims, H. P., Szilagyi, A. D., & Keller, R. T. (1976). The measurement of job characteristics. *Academy of Management Journal*, 19, 195-212.
35. Fried, Y. (1991). Meta-analytic comparison of the Job Diagnostic Survey and Job Characteristics Inventory as correlates of work satisfaction and performance. *Journal of Applied Psychology*, 76, 690-697.

36. Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods*, 8, 274-289.
37. Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.
38. Chow, G. C. (1960). Test of equality between sets of coefficients in two linear regressions. *Econometrica*, 28, 591-605.
39. Kelloway, E. K., & Barling, J. (1991). Job characteristics, role stress and mental health. *Journal of Occupational Psychology*, 64, 291-304.
40. Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24, 285-308.
41. Franklin, R. J., & Baron, R. A. (2012). Do entrepreneurs really experience ultra-high levels of stress? Or does self-selection and the impact of moderating factors help them cope? Paper presented at the *Babson College Entrepreneurship Research Conference*, Fort Worth, TX, June 6-9, 2012.
42. Jamal, M., & Badawi, J. A. (1995). Job stress and quality of working life of self-employed immigrants: A study in workforce diversity. *Journal of Small Business and Entrepreneurship*, 12, 55-63.
43. Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437-453.
44. Akande, A. (1994). Coping with entrepreneurial stress: Evidence from Nigeria. *Journal of Small Business Management*, 32, 83-87.
45. Vasumathi, A., Govindarajalu, S., Anuratha, E. K., & Amudha, R. (2003). Stress and coping styles of an entrepreneur: An empirical study. *Journal of Management Research*, 3, 43-51.

English Abstract

# Job Design Effects on Novice and Repeat Entrepreneurs' Job Stress

Leon Schjoedt

School of Business and Economics, Indiana University, South Bend, IN, 46634, U.S.A.,  
leonschjoedt@ymail.com

## Abstract

In this study the relationships between four core job characteristics (autonomy, task variety, task identity, and feedback) and job stress are examined for 192 novice and 229 repeat entrepreneurs. Autonomy was a significant factor in both novice and repeat entrepreneurs' job stress; whereas, task variety was a significant factor in job stress for novice entrepreneurs but not for repeat entrepreneurs. The results indicate that the job characteristics approach expands the understanding of entrepreneurs' job stress, and that important similarities and differences exist between novice and repeat entrepreneurs in how job characteristics influence job stress.

**Keywords:** Person-Environment Fit, Job Characteristics, Job Stress, Novice Entrepreneurs, Repeat Entrepreneurs

French Abstract\*

Job Design Effects on Novice and Repeat Entrepreneurs' Job Stress

# Effets de la conception des tâches sur le stress au travail pour des les entrepreneurs débutants et récidivistes

Leon Schjoedt

School of Business and Economics, Indiana University, South Bend, IN, 46634, U.S.A.,  
leonschjoedt@ymail.com

## Résumé

Dans cette étude, les relations entre quatre caractéristiques fondamentales d'un emploi (autonomie, la diversité des tâches, l'identification des tâches et la rétroaction) et le stress au travail sont examinées pour 192 entrepreneurs débutants et 229 entrepreneurs récidivistes. L'autonomie s'avère être un facteur important dans le stress au travail, à la fois pour les entrepreneurs débutants et pour les entrepreneurs récidivistes alors que la diversité des tâches est un facteur important dans le stress au travail seulement pour les entrepreneurs débutants, mais pas pour les entrepreneurs récidivistes. Les résultats indiquent que l'approche par les caractéristiques fondamentales de l'emploi améliore la compréhension du stress au travail dans le cas des entrepreneurs, et que des similitudes et différences importantes existent dans la façon dont les caractéristiques de l'emploi influent sur le stress au travail entre les entrepreneurs débutants et entrepreneurs récidivistes.

**Mots-clés:** L'environnement de Person, les caractéristiques de l'emploi, stress au travail, entrepreneurs débutants, entrepreneurs récidivistes

\* Translated by: Johannes Schaaper, Senior professor in International Management, BEM Bordeaux Management School

German Abstract\*

Job Design Effects on Novice and Repeat Entrepreneurs' Job Stress

# Auswirkungen des Jobdesigns auf den Stress von neuen und erfahrenen Unternehmern

Leon Schjoedt

School of Business and Economics, Indiana University, South Bend, IN, 46634, U.S.A.,  
leonschjoedt@ymail.com

## Abstract

In diesem Beitrag wird die Beziehung von vier Kerncharakteristika der Arbeit (Autonomie, Abwechslung, Ganzheitlichkeit der Aufgabe und Feedback) und dem Arbeitsstress anhand von 192 Neuunternehmern und 229 erfahrenen Unternehmern untersucht. Die Autonomie war für beide Gruppen dabei ein signifikanter Faktor auf den Arbeitsstress; die Ganzheitlichkeit der Aufgabe war für die Neuunternehmer ein solcher Faktor, allerdings nicht für die Personen, die bereits zum wiederholten Male als Unternehmer arbeiteten. Die Ergebnisse deuten darauf hin, dass der Ansatz der Arbeitscharakteristika das Verständnis des Arbeitsstress von Unternehmern erweitert und das zentrale Gemeinsamkeiten und Unterschiede zwischen unerfahrenen bzw. neuen Unternehmern und erfahrenen Unternehmern existieren.

**Keywords:** Arbeitsstress, Jobcharakteristika, Jungunternehmer, Altunternehmer, Person-Environment-Fit

\*. Translated by: Prof. Dr. Marc Eulerich, University Duisburg-Essen, marc.eulerich@uni-due.de



Spanish Abstract\*

Job Design Effects on Novice and Repeat Entrepreneurs' Job Stress

# Efectos del Diseño del Trabajo en el Estrés de los Emprendedores Noveles y Consolidados

Leon Schjoedt

School of Business and Economics, Indiana University, South Bend, IN, 46634, U.S.A.,  
leonschjoedt@ymail.com

## Resumen

En este estudio se examinan las relaciones entre las cuatro características fundamentales del puesto de trabajo (autonomía, variedad de tareas, identidad con la tarea y retroalimentación) y el estrés laboral de 192 emprendedores noveles y 229 emprendedores consolidados. La autonomía resultó ser un factor significativo del estrés en el trabajo tanto para los emprendedores noveles como para los consolidados; mientras que la variedad de tareas fue un factor importante en el estrés del trabajo para los emprendedores noveles, pero no para los emprendedores consolidados. Los resultados indican que el enfoque de las características del trabajo expande la comprensión del estrés en el trabajo de los emprendedores, y que existen importantes similitudes y diferencias entre los emprendedores noveles y los consolidados en la forma en que las características del trabajo influyen en el estrés laboral.

**Palabras clave:** Persona-adaptación al entorno, características del empleo, estrés laboral, emprendedores noveles, emprendedores consolidados

\*. Translated by: María Avello. Universidad Complutense de Madrid. mavello@emp.ucm.es

Arabic abstract\*

Job Design Effects on Novice and Repeat Entrepreneurs' Job Stress

## آثار التصميم الوظيفي على الضغط الوظيفي للريادين المبتدئين و غير المبتدئين

Leon Schjoedt

School of Business and Economics, Indiana University, South Bend, IN, 46634, U.S.A.,  
leonschjoedt@ymail.com

### ملخص

بحثت هذه الدراسة العلاقة بين أهم أربع صفات للوظيفة ( الاستقلالية، تنوع المهام، هوية المهمة (شمولية المهمة)، التغذية الراجعة) و الضغط (التوتر) الوظيفي لدى (192) ريادي مبتدئ و (229) ريادي غير مبتدئ. أظهرت الدراسة أن الاستقلالية الوظيفية عامل مهم و أساسي للريادين المبتدئين و غير المبتدئين، أما بالنسبة لعامل التنوع الوظيفي فيعد عامل مهم للريادين المبتدئين دون الغير مبتدئين. تشير نتائج الدراسة الى أن طريقة الصفات الوظيفية توضح مفهوم التوتر الوظيفي بشكل أكبر، و تبين التشابهات و الفروقات المهمة بين الريادين المبتدئين و غير المبتدئين من حيث تأثير الصفات الوظيفية على الضغط (التوتر) الوظيفي.

**الكلمات الدالة:** مناسبة الشخص للبيئة، الصفات الوظيفية، الضغط / التوتر الوظيفي، الريادين المبتدئين، الريادين الغير مبتدئين

\* Translated by: Zu'bi M.F.Al-Zu'bi, Ph.D, FHEA, University of Jordan, z.alzubi@ju.edu.jo

Italian Abstract\*

Job Design Effects on Novice and Repeat Entrepreneurs' Job Stress

# Gli effetti del modo di organizzare il lavoro sullo stress lavorativo di imprenditori novizi e imprenditori protagonisti di vari progetti imprenditoriali

Leon Schjoedt

School of Business and Economics, Indiana University, South Bend, IN, 46634, U.S.A.,  
leonschjoedt@ymail.com

## Abstract

In questo studio viene esaminata la relazione fra quattro caratteristiche chiave dell'organizzazione del lavoro (autonomia, varietà di compiti, identità di compiti, feedback) rispetto allo stress lavorativo con riferimento a 192 imprenditori novizi e 229 imprenditori protagonisti di vari progetti imprenditoriali. L'autonomia era un fattore significativo sia per il lavoro sia di imprenditori novizi che di imprenditori ma non per quelli protagonisti di vari progetti imprenditoriali. I risultati indicano che l'approccio alle caratteristiche lavorative espande la comprensione da parte degli imprenditori delle caratteristiche dello stress da lavoro, e che esistono differenze importanti similarità fra imprenditori novizi e imprenditori protagonisti di vari progetti imprenditoriali sul come le caratteristiche del lavoro influenzino lo stress percepito.

**Keywords:** inserimento della persona all'interno dell'ambiente, caratteristiche del lavoro, stress da lavoro, imprenditori novizi, imprenditori protagonisti di vari progetti imprenditoriali

\*. Translated by: Riccardo Paterni, co-founder Synergy Pathways, [riccardo@synergypathways.net](mailto:riccardo@synergypathways.net)